

CLAIMS

1. A speaker grille provided with a sound opening, the speaker grille being fixed at a fixing portion on the outer circumference and disposed in front of a speaker comprising a diaphragm including an edge portion, the speaker reproducing sounds of 1 kHz and higher; wherein
5 the sound opening includes a line opposing to a region extending from the edge portion of the diaphragm to the fixing portion on the outer circumference.
2. The speaker grille of claim 1, wherein
10 the sound opening includes a line opposing to the outer circumference of the edge portion of the diaphragm.
3. The speaker grille of claim 1, wherein
15 the speaker is provided with one of a round vibration plane and an oval vibration plane, the sound opening includes an arc-shape curve in parallel with the fixing portion on the outer circumference.
4. The speaker grille of claim 1, wherein
20 the sound opening is one of a plurality of sound openings, and the speaker grille is further provided with a reinforcement rib for separating the sound openings.
5. The speaker grille of claim 1, wherein
25 the speaker is provided with one of a round vibration plane and an oval vibration plane, an effective open area of the sound opening is at least 31 % and less than 60 % of a projected area of the vibration plane.
6. The speaker grille of claim 1, wherein

the speaker is provided with a vibration plane of an oblong round shape, an effective open area of the sound opening is at least 22 % and less than 60% of a projected area of the vibration plane.

7. The speaker grille of claim 6, wherein

5 the effective open area of the sound opening is at least 48 % and less than 60% of the projected area of the vibration plane.

8. The speaker grille of claim 1, wherein

10 the speaker is provided with a vibration plane of an oblong round shape, the sound opening is one of a plurality of sound openings, and the speaker grille is further provided with reinforcement ribs in a direction of a shorter side of the vibration plane, the ribs separating the sound openings.

9. The speaker grille of claim 8, further provided with a block portion for blocking a central portion of the vibration plane at the middle with respect to a longer side of the vibration plane.

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10. The speaker grille of claim 9, further provided with a magnet on a surface of the block portion, the surface opposing to the vibration plane.

11. The speaker grille of claim 1, wherein

20 the speaker is provided with a vibration plane of an oblong round shape, the sound opening is one of two sound openings, and the speaker grille is further provided with a first reinforcement rib extending in a direction of a longer side of the vibration plane and disposed at the middle with respect to the direction of the shorter side of the vibration plane, the first rib separating the two sound openings in a direction of a shorter side of the vibration plane.

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12. The speaker grille of claim 11, further provided with second reinforcement ribs in the direction of the shorter side of the vibration plane for splitting each of the two sound openings.

13. The speaker grille of claim 11, further provided with a magnet on a surface of the first reinforcement rib, the surface opposing to the vibration plane.